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10/535,394	05/18/2005	Hiroshi Kutsumi	2005_0794A	4400

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EXAMINER	
TANG, KAREN C	
ART UNIT	PAPER NUMBER
2151	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/535,394	KUTSUMI ET AL.	
	Examiner	Art Unit	
	KAREN C. TANG	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-29,31-37,40 and 42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-29,31-37,40 and 42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

- This action is responsive to the amendment and remarks file on 1/7/08.
- Claims 22-29, 31-37, 40 and 42 are presented for further examination.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 1/7/08 have been fully considered but they are not persuasive.

Applicant argues that the cited art of records failed to disclose the amended limitations.

Examiner disagrees.

Hoffberg et al and Michihiro disclosed the amended limitations as follow:

Hoffberg disclosed an operation history utilization system which utilizes a user's operation history on a device, and provides the user with a service, the system comprising:

a device (refer to Col 41, Lines 60-61, "air conditioning control, lighing, appliances, machinery") operable to transmit which has a function of transmitting operation data that describes a user's operation details (refer to Col 42, Lines 3-7) on said device;

a reception unit operable to receive operation data describing the user's operation details transmitted from the device (refer to Col 69, Lines 53-67 and Col 78, Lines 44-67, and Col 42, Lines 3-9);

wherein said service provision apparatus includes:

an operation history reception unit operable to receive the operation history data transmitted from said device (refer to Col 69, Lines 53-67 and Col 78, Lines 44-67); an operation history database unit operable to accumulate the received operation history data (refer to Col 69, Lines 53-67); a pattern extraction unit operable to extract the frequent operation pattern from the

operation history data accumulated in said operation history database unit (Col 126, Lines 25-30 and Co); a pattern monitor unit operable to monitor whether or not a sequence of operation history data newly received by said operation history reception unit corresponds to the frequent operation pattern stored in said pattern database unit (refer to Col 126, Lines 31-33) and a function database unit operable to store a predetermined relationship between an operation performed by said device and a function provided to the user in response to the operation (refer to Col 53, Lines 66-67 and Col 54, Lines 1-10); wherein said pattern extraction unit is operable to compare the operation history data accumulated in said operation history database unit with a predetermined relationship in said function database unit, convert the operation history data into a sequence of functions, extract a frequent operation pattern from the sequence of functions, and store the extracted frequent operation pattern into said pattern database unit (refer to Col 127, Lines 15-41 and Col 41, Lines 3-67).

Although Hoffberg disclosed the invention substantially as claimed, Hoffberg is silent regarding " a service provision apparatus operable to (i) accumulate the operation data transmitted from said device as operation history data in chronological order, (ii) specify a frequent operation pattern which is a sequence of frequent operation history patterns based on the accumulated operation history data and (iii) provide a service according to the user's behavior predicted from the specified frequent operation pattern included in the accumulated operation history data, wherein said service provision apparatus includes: a pattern database unit operable to store the extracted frequent operation pattern;); a service provision unit operable to provide the service according to the user's behavior predicted from a result of the monitoring performed by said pattern monitor unit;"

Michihiro, in an analogous art disclosed " a service provision apparatus operable to (i) accumulate the operation data transmitted from said device as operation history data in chronological order (refer to page 4, Lines 20-22, page 5, Lines 11-12), (ii) specify a frequent operation pattern which is a sequence of frequent operation history patterns based on the accumulated operation history data (refer to page 4, Lines 22-25) and (iii) provide a service according to the user's behavior predicted from the specified frequent operation pattern included in the accumulated operation history data (refer to page 4, Lines 9-11 and Lines 27-28), wherein said service provision apparatus includes: a pattern database unit operable to store the extracted frequent operation pattern (refer to page 5, Lines 27-30); a service provision unit operable to provide the service according to the user's behavior predicted from a result of the monitoring performed by said pattern monitor unit (refer to page 4, Lines 9-11 and Lines 27-28);"
Hence, providing functionalities disclosed by Michihiro, would be desirable for to implement in order to enable a controller that have capabilities to provide services to a user based on monitoring user operation onto a device.
Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Hoffberg by including the features disclosed by Michihiro.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 22-29, 31-37, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffberg et al hereinafter Hoffberg (US 6,400,996) and in view of Michihiro (JP2002-007020).

1. Referring to Claims 22, 36, 40 and 42, Hoffberg disclosed an operation history utilization system which utilizes a user's operation history on a device, and provides the user with a service, the system comprising:

a device (refer to Col 41, Lines 60-61, "air conditioning control, lighing, appliances, machinery") operable to transmit which has a function of transmitting operation data that describes a user's operation details (refer to Col 42, Lines 3-7) on said device;

a reception unit operable to receive operation data describing the user's operation details transmitted from the device (refer to Col 69, Lines 53-67 and Col 78, Lines 44-67, and Col 42, Lines 3-9);

wherein said service provision apparatus includes:

an operation history reception unit operable to receive the operation history data transmitted from said device (refer to Col 69, Lines 53-67 and Col 78, Lines 44-67); an operation history database unit operable to accumulate the received operation history data (refer to Col 69, Lines 53-67); a pattern extraction unit operable to extract the frequent operation pattern from the operation history data accumulated in said operation history database unit (Col 126, Lines 25-30 and Co); a pattern monitor unit operable to monitor whether or not a sequence of operation history data newly received by said operation history reception unit corresponds to the frequent operation pattern stored in said pattern database unit (refer to Col 126, Lines 31-33) and a

function database unit operable to store a predetermined relationship between an operation performed by said device and a function provided to the user in response to the operation (refer to Col 53, Lines 66-67 and Col 54, Lines 1-10); wherein said pattern extraction unit is operable to compare the operation history data accumulated in said operation history database unit with a predetermined relationship in said function database unit, convert the operation history data into a sequence of functions, extract a frequent operation pattern from the sequence of functions, and store the extracted frequent operation pattern into said pattern database unit (refer to Col 127, Lines 15-41 and Col 41, Lines 3-67).

Although Hoffberg disclosed the invention substantially as claimed, Hoffberg is silent regarding " a service provision apparatus operable to (i) accumulate the operation data transmitted from said device as operation history data in chronological order, (ii) specify a frequent operation pattern which is a sequence of frequent operation history patterns based on the accumulated operation history data and (iii) provide a service according to the user's behavior predicted from the specified frequent operation pattern included in the accumulated operation history data, wherein said service provision apparatus includes: a pattern database unit operable to store the extracted frequent operation pattern;); a service provision unit operable to provide the service according to the user's behavior predicted from a result of the monitoring performed by said pattern monitor unit;"

Michihiro, in an analogous art disclosed " a service provision apparatus operable to (i) accumulate the operation data transmitted from said device as operation history data in chronological order (refer to page 4, Lines 20-22, page 5, Lines 11-12), (ii) specify a frequent operation pattern which is a sequence of frequent operation history patterns based on the

accumulated operation history data (refer to page 4, Lines 22-25) and (iii) provide a service according to the user's behavior predicted from the specified frequent operation pattern included in the accumulated operation history data (refer to page 4, Lines 9-11 and Lines 27-28), wherein said service provision apparatus includes: a pattern database unit operable to store the extracted frequent operation pattern (refer to page 5, Lines 27-30); a service provision unit operable to provide the service according to the user's behavior predicted from a result of the monitoring performed by said pattern monitor unit (refer to page 4, Lines 9-11 and Lines 27-28);"
Hence, providing functionalities disclosed by Michihiro, would be desirable for to implement in order to enable a controller that have capabilities to provide services to a user based on monitoring user operation onto a device.
Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Hoffberg by including the features disclosed by Michihiro.

2. Referring to Claims 23 and 24, the operation history utilization system according to Claim 22, although Hoffberg disclosed the invention substantially as claimed, Hoffberg is silent regarding "wherein said service provision apparatus includes: a user server apparatus which (i) accumulates the operation history data, (ii) specifies the frequent operation pattern based on the accumulated operation history data and (iii) predicts the user's behavior from the specified frequent operation pattern; provides service according to the user's behavior predicted by said user server apparatus."
Michihiro, in an analogous art disclosed "(i) accumulates the operation history data (refer to Page 5, Lines 11-12), (ii) specifies the frequent operation pattern based on the accumulated

operation history data (refer to page 4, Lines 22-25) and (iii) predicts the user's behavior from the specified frequent operation pattern (refer to page 4, Lines 22-25); and an application server apparatus which provides service according to the user's behavior predicted by said user server apparatus. (refer to page 4, Lines 9-11, Lines 27-28)"

Hoffberg and Michihiro did not explicitly disclose a user server apparatus and an application server apparatus to perform functions described above, it would have been obvious to one of ordinary skill in the art to use two different servers or any number of servers to perform the functions as described above. Using distributed server to perform multiple step functions is efficient as tasks are distributed.

Hence, providing functionalities disclosed by Michihiro, would be desirable for to implement in order to enable a controller that have capabilities to provide services to a user based on monitoring user operation onto a device.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Hoffberg by including the features disclosed by Michihiro.

3. Referring to Claim 25, the operation history utilization system according to Claim 22, Hoffberg disclosed wherein said device includes: a device that the user operation history of the device are received in the user history database (refer to Col 69, Lines 53-67); storing operation history data in which a date and a time of an operation in association with details of an a type of operation (refer to Col 69, Lines 53-67 and Col 78, Lines 44-67 and Col 89, Lines 34-61 and Col 113, Lines 55-62);

Although Hoffberg disclosed the invention substantially as claimed, Hoffberg did not explicitly disclosed the explicit operation information and the user operation history is stored in the device. Michihiro disclosed a device that includes: an operation history storage unit operable to store operation history data (refer to page 1, Lines 14 and page 4, Lines 20-21, and page 5, Lines 4-5); accumulate, into an operation history database, the operation details and the operation state in which the operation is performed (refer to page 6, Lines 5-7);
Hence, providing functionalities disclosed by Michihiro, would be desirable for to implement in order to enable a controller that have capabilities to provide services to a user based on monitoring user operation onto a device.
Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Hoffberg by including the features disclosed by Michihiro.

4. Referring to Claim 26, the operation history utilization system according to Claim 25, Hoffberg disclosed wherein said device further includes a viewing history storage unit operable to store viewing history data related to content viewed by the user and said operation history transmission unit is operable to transmit, to said service provision apparatus, the viewing history data stored in said viewing history storage unit together with the operation history data (refer to Col 76, Lines 13-14).

5. Referring to Claim 27, the operation history utilization system according to Claim 25, Hoffberg disclosed wherein said device further includes a user identification unit operable to identify the user who performed the operation (fig 17, elements 1701, Col 84, Lines 46-64), and

said operation history storage unit is operable to store a result identified by said user identification unit as a part of the operation history (refer to Col 89, Lines 6-11).

6. Referring to Claim 28, the operation history utilization system according to Claim 25, Hoffberg disclosed wherein said device is operable to store information as a part of an operation history into said operation history storage unit, the information describing a communication partner (refer to Col 89, Lines 6-11).

7. Referring to Claim 31, the operation history utilization system according to Claim 22, Hoffberg disclosed wherein said service provision apparatus includes: a viewing history reception unit operable to receive the viewing history data transmitted together with the operation history data from said device (refer to Col 69, Lines 53-67, Col 78, Lines 44-67, Lines 41-51); and a viewing history database unit operable to accumulate the received viewing history data (refer to Col 76, Lines 13-14, Lines 41-51); and said pattern extraction unit is operable to extract a frequent pattern from both of the operation history data accumulated in said operation history database unit and the viewing history data accumulated in said viewing history database unit (refer to Col 126, Lines 25-30).

8. Referring to Claim 32, the operation history utilization system according to Claim 22, Hoffberg disclosed wherein said pattern extraction unit is operable to utilize information regarding the user operating said device so as to extract the frequent operation pattern, the information being transmitted from said device (refer to Col 126, Lines 25-30).

9. Referring to Claim 33, the operation history utilization system according to Claim 22, Hoffberg disclosed wherein said pattern extraction unit is operable to utilize information regarding a communication partner so as to extract the frequent operation pattern, the information being transmitted from said device (refer to Col 126, Lines 25-30).

10. Referring to Claim 34, the operation history utilization system according to Claim 22, Hoffberg disclosed comprising a plurality of devices which transmit respective operation data describing the details of the user's operation (refer to Col 42, Lines 3-9).
Although Hoffberg disclosed the invention substantially as claimed, Hoffberg is silent regarding "wherein said service provision apparatus includes: a user server apparatus which (i) accumulates the operation history data, (ii) specifies the frequent operation pattern based on the accumulated operation history data and (iii) predicts the user's behavior from the specified frequent operation pattern; provides service according to the user's behavior predicted by said user server apparatus."
Michihiro, in an analogous art disclosed "(i) accumulates the operation history data (refer to Page 5, Lines 11-12), (ii) specifies the frequent operation pattern based on the accumulated operation history data (refer to page 4, Lines 22-25) and (iii) predicts the user's behavior from the specified frequent operation pattern (refer to page 4, Lines 22-25); and an application server apparatus which provides service according to the user's behavior predicted by said user server apparatus. (refer to page 4, Lines 9-11, Lines 27-28)"

Hoffberg and Michihiro did not explicitly disclose a user server apparatus and an application server apparatus to perform functions described above, it would have been obvious to one of ordinary skill in the art to use two different servers or any number of servers to perform the functions as described above. Using distributed server to perform multiple step functions is efficient as tasks are distributed.

Hence, providing functionalities disclosed by Michihiro, would be desirable for to implement in order to enable a controller that have capabilities to provide services to a user based on monitoring user operation onto a device.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Hoffberg by including the features disclosed by Michihiro.

11. Referring to Claim 35, the operation history utilization system according to Claim 22, Hoffberg disclosed wherein said serviced provision apparatus provides the service by automatically controlling said device according to the frequent operation pattern (refer to Col 42, Lines 3-9).

12. Referring to Claim 37, the operation history utilization method according to Claim 36, Hoffberg disclosed the method comprising steps of: storing operation history data in which a date and a time of an operation in association with details of an a type of operation (refer to Col 69, Lines 53-67 and Col 78, Lines 44-67 and Col 89, Lines 34-61 and Col 113, Lines 55-62); Although Hoffberg disclosed the invention substantially as claimed, Hoffberg is silent regarding "transmitting the stored operation history data from said device at a predetermined timing."

Michihiro, in an analogous art disclosed ""transmitting the stored operation history data from said device at a predetermined timing. "(page 4, Lines 20-21 and Page 5, Lines 4-5, Page 6, Lines 5-7)

Hence, providing functionalities disclosed by Michihiro, would be desirable for to implement in order to enable a controller that have capabilities to provide services to a user based on monitoring user operation onto a device.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Hoffberg by including the features disclosed by Michihiro.

Conclusion

Examiner's Notes: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/K. C. T./

Examiner, Art Unit 2151

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2151